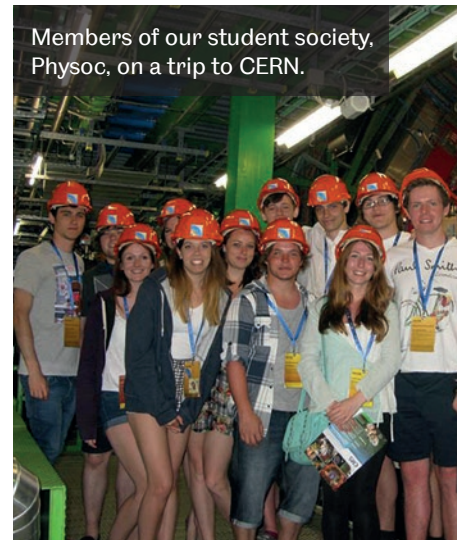


Study abroad.

If you want to study abroad, you can apply to spend time in destinations including Australia, Canada, Europe, New Zealand and the USA after you've joined the University.

Universities that Sheffield physics students have gone to include:

- McMaster University, Ontario, Canada
- Monash University, Melbourne, Australia
- University of Auckland, New Zealand
- University of Illinois at Urbana-Champaign, USA
- University of Texas at Austin, USA



Industrial Placement Year.

You can also apply to do a placement year as part of your degree after you've joined the University. You can apply your physics knowledge in a scientific organisation or use the transferable skills from your degree in a role outside science.

You'll pay reduced fees for the year you're on placement, and can earn a salary throughout.

Organisations where physics students have done their placements include:

- CERN, Switzerland
- Daresbury Laboratory, Science and Technology Facilities Council
- IBM
- Sellafield Ltd

Be Sheffield Made.



The information given here is based on the current academic year. There may be some changes before you start your course. For the latest information, visit our website.

www.sheffield.ac.uk/physics
www.youtube.com/sciencesheffield



Your Physics with Particle Physics course.



UCAS codes:
F372 / F373

In the first two years of your course, you'll cover the essential physics behind everything else you'll study. Lectures and lab classes are included in the same modules, so you'll run experiments to help you understand important theories even more clearly.

There are specialist particle physics modules and options on other topics in physics from the start of your degree. MPhys students spend half of their final year working in one of our leading research groups on an unanswered question in physics.

Level one.

Core modules:

- Fields and Quanta
- Frontiers in Physics I
- Mathematics for Physicists and Astronomers (Introductory and Further)
- Motion and Heat

Optional modules:

- Introduction to Optics
- Introduction to Astrophysics
- Introduction to Electric and Electronic Circuits
- Our Evolving Universe
- Physics of Living Systems 2
- The Physics of Sustainable Energy
- The Solar System

Level two.

Core modules:

- Classical and Quantum Physics
- Detection of Fundamental Particles
- Programming in Python
- Special Relativity and Subatomic Physics

Optional modules:

- Aspects of Medical Imaging and Technology
- Astronomical Spectroscopy
- Galaxies
- Physics of Materials
- Stellar Structure and Evolution
- The Physics of Music



Level three.

Core modules:

- Atomic and Laser Physics
- Particle Physics
- Problem Solving in Physics
- Semiconductor Physics and Technology
- Solid State Physics
- Statistical Physics (optional on BSc)

Optional modules:

- Advanced Programming in Python
- Astrobiology
- Dark Matter and the Universe (core on BSc)
- History of Astronomy
- Industrial Group Project in Physics
- Introduction to Cosmology
- Introduction to Soft Matter and Biological Physics
- Mathematical Physics

- Microscopy and Spectroscopy Laboratory
- Nuclear Physics (core on BSc)
- Origin of the Chemical Elements (core on BSc)
- Physical Computing
- Physics Education and Outreach
- Physics in an Enterprise Culture
- Quantum Information Laboratory
- Research Project in Physics

Level four (MPhys only).

Core modules:

- Advanced Particle Physics
- Research Project
- The Development of Particle Physics

Optional modules:

- Advanced Quantum Mechanics
- An Introduction to General Relativity
- Dark Matter and the Universe

- Galaxy Formation and Evolution
- History of Astronomy
- Introduction to Cosmology
- Optical Properties of Solids
- Origin of the Chemical Elements
- Physics in an Enterprise Culture
- Star Formation and Evolution